

This listing of claims will replace all prior versions and listings of the claims in the application:

**In the Claims:**

1. (Previously presented) An integrated filtration and detection device for collecting and detecting the growth of microorganisms in a specimen, said device comprising:

- a) a container defining a chamber therein and having an inlet and an outlet in fluid communication with said chamber;
- b) a filter for filtering fluids, said filter mounted in said chamber between said inlet and said outlet; and
- c) a sensor mounted in said chamber parallel to and against an end wall of said chamber, said sensor operative to exhibit a change in a measurable property thereof upon exposure to changes in said chamber due to microbial growth; wherein said container has a transparent section and changes in said measurable property of said sensor are detectable through said transparent section; and said sensor and said filter are disposed at opposed ends of said chamber.

2. (Original) The device of Claim 1 wherein said filter is a microporous filter.

3. (Original) The device of Claim 1 wherein said filter is a radial flow filter.

4. (Original) The device of Claim 1 wherein said sensor is responsive to at least one of a change in pH and the presence of CO<sub>2</sub>.

5. (Original) The device of Claim 1 wherein said sensor is operative to change color in response to at least one of a change in pH and the presence of CO<sub>2</sub> in said chamber.

6. (Cancelled).

7. (Previously presented) The device of Claim 1 wherein said sensor is bonded to said interior surface of said container.

8. (Cancelled).

9. (Original) The device of Claim 1 wherein said container is formed of a plastic.

10. (Cancelled).

11. (Original) The device of Claim 1 wherein said container includes a container body and a removable end cap.

12. (Original) The device of Claim 11 including an O-ring seal between said container body and said end cap.

13. (Original) The device of Claim 11 wherein said inlet and said outlet are formed in said end cap.

14. (Previously presented) An integrated filtration and detection device for collecting and detecting the growth of microorganisms in a specimen, said device comprising:

a) a container defining a chamber therein and including:  
an inlet and an outlet in fluid communication with said chamber; and  
a transparent section;

b) a microporous filter for filtering fluids, said filter mounted in said chamber between said inlet and said outlet; and

c) a sensor mounted in said chamber parallel to and against an end wall of said chamber, said sensor operative to change color in response to at least one of a change in pH and the presence of CO<sub>2</sub> in said chamber due to microbial growth, wherein changes in the color of said sensor are detectable through said transparent section;  
wherein said sensor and said filter are disposed at opposed ends of said chamber.

15. (Original) The device of Claim 14 wherein said filter is a radial flow filter.

16. (Cancelled).

17. (Original) The device of Claim 14 wherein said chamber has a volume of between about 10 milliliters and 1 liter.

18. (Original) The device of Claim 14 wherein said container is formed of a plastic.

19. (Cancelled).

20. (Original) The device of Claim 14 wherein said container includes a container body and a removable end cap, said inlet and said outlet are formed in said end cap, said device including an O-ring seal between said container body and said end cap.

21. (Previously presented) A system for detecting the growth of specimen in a specimen, said system comprising:

a) an integrated filtration and detection device comprising:  
a container defining a chamber therein and having an inlet and an outlet in fluid communication with said chamber;

a filter for filtering fluids, said filter mounted in said chamber between said inlet and said outlet; and

a sensor mounted in said chamber parallel to and against an end wall of said chamber, said sensor operative to exhibit a change in a measurable property thereof upon exposure to changes in said chamber due to microbial growth;

wherein said sensor and said filter are disposed at opposed ends of said chamber; and

b) a measuring apparatus operable to detect the measurable property of said sensor.

22-28 (Cancelled).

29. (New) The device of Claim 1 wherein said device has an operative testing orientation and, when said device is in said operative testing orientation, said sensor resides at a lower end of said chamber and below said filter.

30. (New) The device of Claim 29 wherein said end wall is a fixed end wall of said container having a continuous closed surface.

31. (New) The device of Claim 30 wherein said container is unitary and said inlet and said outlet are the only openings into said container communicating with said chamber.

32. (New) The device of Claim 31 wherein, when said device is in said operative testing orientation, said inlet and said outlet are each located above said sensor.

33. (New) The device of Claim 1 wherein said end wall is a fixed end wall of said container having a continuous closed surface.

34. (New) The device of Claim 33 wherein said container is unitary and said inlet and said outlet are the only openings into said container communicating with said chamber.

35. (New) The device of Claim 1 wherein said container includes:  
a container body having an end opening opposite said end wall on which said sensor is mounted; and  
an end cap secured over and sealing said end opening;  
wherein said inlet and said outlet are formed in said end cap.

36. (New) The device of Claim 1 including a liquid culturing medium disposed in said chamber, wherein:  
said sensor resides at a lower end of said chamber and below said filter; and  
said liquid culturing medium is disposed in said lower end of said chamber and contacts said sensor in said lower end of said chamber.

37. (New) The device of Claim 36 wherein:  
said end wall is a fixed end wall of said container having a continuous closed surface; and  
said inlet and said outlet are each located above said sensor.

38. (New) The device of Claim 36 wherein said chamber is fully sealed.

39. (New) The device of Claim 14 wherein said device has an operative testing orientation and, when said device is in said operative testing orientation, said sensor resides at a lower end of said chamber and below said filter.

40. (New) The system of Claim 21 wherein said device has an operative testing orientation and, when said device is in said operative testing orientation, said sensor resides at a lower end of said chamber and below said filter.